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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,130	02/20/2002	Richard B. Meagher	21099.0074U2	6995
7590 09/17/2004			EXAMINER	
David G. Perryman, Esq. NEEDLE & ROSENBERG, P.C. The Candler Building, Suite 1200 127 Peachtree Street, N.E. Atlanta, GA 30303-1811			OUSPENSKI, ILIA I	
			ART UNIT	PAPER NUMBER
			1644	
Anama, GA	70303-1611		DATE MAILED: 09/17/2004	<b>,</b>

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action 0	10/079,130	MEAGHER ET AL.			
Office Action Summary	Examiner	Art Unit			
	ILIA OUSPENSKI	1644			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on	_•				
2a) This action is <b>FINAL</b> . 2b) This	action is non-final.				
3) Since this application is in condition for allowar closed in accordance with the practice under E					
Disposition of Claims					
4) ☐ Claim(s) 1-147 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) 1-147 are subject to restriction and/or	vn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Examine	r.				
,	) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.				
Applicant may not request that any objection to the o	• , ,	` ·			
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Example 11.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Application ity documents have been receive (PCT Rule 17.2(a)).	on No d in this National Stage			
Attachment(s)					
Notice of References Cited (PTO-892)	4) Interview Summary (				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te atent Application (PTO-152)			

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## **DETAILED ACTION**

- 1. Claims 1 147 are pending.
- 2. The instant application appears to be in sequence compliance for patent applications containing nucleotide sequence and/or amino acid sequence disclosures.

## Restriction Requirement

- 3. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- I. Claims 1 34, 42, 112 121, and 130 138, drawn to a hybridoma cell or a population of hybridoma cells, classified in Class 435, subclass 326.
- II. Claims 35 41 and 88 91, drawn to a method of making a hybridoma cell, classified in Class 435, subclass 449.
- III. Claims 43 55 and 110, drawn to a B cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 455.
- IV. Claims 56 59, drawn to a method of making a B cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 326.
- V. Claims 60 67, drawn to a myeloma cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 455.

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- VI. Claims 68-69, drawn to a method of making a myeloma cell comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 326.
- VII. Claims 70 73, 76 79, and 82 85, drawn to a method of making a monoclonal antibody, classified in Class 435, subclass 70.21.
- VIII. Claims 74 75, 80 81, and 86 87, drawn to a monoclonal antibody, classified in Class 530, subclass 388.1.
- IX. Claims 92 97, 105 106, and 109, drawn to a transgenic animal comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 800, subclass 13.
- X. Claims 98 104, drawn to a method of generating a transgenic animal comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 800, subclass 21.
- XI. Claims 107 108, drawn to a method of identifying a cell that produces a monoclonal antibody that recognizes a specific antigen, classified in Class 435, subclass 7.1.
- XII. Claim 111, drawn to a hematopoietic cell comprising a vector encoding  $lg\alpha$  or  $lg\beta$ , classified in Class 435, subclass 455.
- XIII. Claims 122 129 and 139 147, drawn to a population of plasma cells comprising a vector encoding  $Ig\alpha$  or  $Ig\beta$ , classified in Class 435, subclass 326.
- 4. Groups I, III, V, VIII, IX, XII, and XIII are different products. Hybridoma cells, B cells, myeloma cells, monoclonal antibodies, transgenic animals, hematopoietic cells and plasma cells differ with respect to their structures and physicochemical properties

and require non-coextensive searches. Therefore, each product is patentably distinct, and searching of these Inventions would impose an undue burden.

Groups II, IV, VI, VII, X, and XI are different methods. The methods differ with respect to ingredients, method steps, and/or endpoints; therefore, each method is patentably distinct. Furthermore, the distinct ingredients, method steps, and/or endpoints require separate and distinct searches. As such, it would be burdensome to search these Inventions together.

Groups I and VII are related as product and process of using. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the monoclonal antibodies of Group VII can be made by phage display, in addition to the hybridoma cells of Group I.

5. These inventions are distinct for the reasons given above. In addition, they have acquired a separate status in the art as shown by different classification and/or recognized divergent subject matter. Further, even though in some cases the classification is shared, a different field of search would be required based upon the structurally distinct products recited and the various methods of use comprising distinct method steps. Moreover, a prior art search also requires a literature search. It is an undue burden for the examiner to search more than one invention. Therefore restriction for examination purposes as indicated is proper.

## Species Election

- 6. This application contains claims directed to the following patentably distinct species of the claimed Inventions I XIII, wherein the surface-expressed antibody receptor is:
  - (A)  $lg\alpha$ , or
  - (B)  $\lg \beta$ .

These species are distinct because their structures, physicochemical properties and mode of action are different, and they do not share a common structure that is disclosed to be essential for common utility. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 17, for example, is generic.

- 7. This application contains claims directed to the following patentably distinct species of the claimed Inventions I III, V, VI, and IX, wherein the  $Ig\alpha$  receptor comprises mutations:
  - (A) Y176F,
  - (B) Y182F,
  - (C) Y193F, or
  - (D) Y204F.

These species are distinct because their structures, physicochemical properties and mode of action are different. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 23, for example, is generic.

- 8. This application contains claims directed to the following patentably distinct species of the claimed Inventions I III, V, VI, and IX, wherein the  $Ig\beta$  receptor comprises mutations:
  - (A) Y190F, or
  - (B) Y206F.

These species are distinct because their structures, physicochemical properties and mode of action are different. Furthermore, the examination of these species would require different searches in the scientific literature.

Applicant is required under 35 USC 121 to elect a single disclosed species to which the claims would be restricted if no generic claim is finally held to be allowable. Currently, claim 23, for example, is generic.

9. Applicant is advised that a response to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 C.F.R. § 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. M.P.E.P. § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. § 103 of the other invention.

10. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. *Process claims that depend from or otherwise include all the limitations of the patentable product* will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims

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and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. *Failure to do so may result in a loss of the right to rejoinder.* 

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

- 11. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
- 12. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ILIA OUSPENSKI whose telephone number is 571-272-2920. The examiner can normally be reached on Monday-Friday 9 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on 571-272-0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ILIA OUSPENSKI

Examiner

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September 7, 2004

PHOUP GAMBEL, PH.D PRIMARY EXAMINER

TEM CONTEN 1600

9/15/04

MALLED FROM ZIPCODE TECH CENTER 1600/2900 RECEIVED OCT 0 6 2004 AN EQUAL OPPORTUNITY EMPLOYER District Land Land Under To Famen Die Seine de Commente de Comme Discourse Line Organization IC 1600 BIdg. REMSEN U. S. DEPARTMENT OF COMMERCE ALEXANDRIA, VA 22313-1450 IF UNDELIVERABLE RETURN IN TEN DAYS COMMISSIONER FOR PATENTS OFFICIAL BUSINESS P.O. BOX 1450